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OGDEN, EXAMINER

A1M1

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ART UNIT PAPER NUMBER

1105

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DATE MAILED: 04/22/93

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

- ☒ This application has been examined ☐ Responsive to communication filed on _____ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), 0 days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- ☒ Notice of References Cited by Examiner, PTO-892.
- ☐ Notice re Patent Drawing, PTO-948.
- ☐ Notice of Art Cited by Applicant, PTO-1449.
- ☐ Notice of informal Patent Application, Form PTO-152.
- ☐ Information on How to Effect Drawing Changes, PTO-1474.
- ☐

Part II SUMMARY OF ACTION

1. ☒ Claims 1-27 are pending in the application.

Of the above, claims _____ are withdrawn from consideration.

2. ☐ Claims _____ have been cancelled.

3. ☐ Claims _____ are allowed.

4. ☒ Claims 1-27 are rejected.

5. ☐ Claims _____ are objected to.

6. ☐ Claims _____ are subject to restriction or election requirement.

7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable. ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed on _____, has been ☐ approved. ☐ disapproved (see explanation).

12. ☐ Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received
☐ been filed in parent application, serial no. _____; filed on _____

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

EXAMINER'S ACTION

Claims 1-27 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The aforementioned claims are considered vague and indefinite because they fail to recite the relative proportions of the required components. One of ordinary skill in the art would be unable to determine the metes or bound of the claimed invention.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Evaluations of the level of ordinary skill in the art requires consideration of such factors as various prior art approaches, types of problems encountered in the art, rapidity with which innovations are made, sophistication of technology involved, educational background of those actively working in the field, commercial success, and failure of others.

The "person having ordinary skill" in this art has the capability of understanding the scientific and engineering principles applicable to the claimed invention. The evidence of record including the references and/or the admission are considered to reasonably reflect this level of skill.

Claims 1-27 are rejected under 35 U.S.C. § 103 as being unpatentable over McGraw et al '144.

McGraw et al '144 disclose a lubricant composition that is miscible in hydrofluorocarbon and hydrochlorofluorocarbon refrigerants (col. 2, lines 1-5). The polyoxyalkylene glycols employed in said lubricant composition have an average molecular weight from about 400 to 5000 (col. 2, line 20-24). Furthermore, suitable ~~esters~~ ^{esters of} which may be used consist of, pentaerythritol, dipentaerythritol, tripentaerythritol, trimethylolpropane, and trimethylolethane (col. 2, lines 35-42). McGraw et al '144 disclose 1,1,1,2,-tetrafluoroethane, 1,1,2,2, tetrafluoroethane, pentafluoroethane, and chlorodifluoromethane as useful refrigerants that may be employed in said lubricant composition (col. 4, lines 3-15). Although McGraw et al '144 do not exemplify the instantly required composition it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the instantly required components in view of the teachings by McGraw et al '144.

Claims 1-27 rejected under 35 U.S.C. § 103 as being unpatentable over McGraw '180 in view of Zehler et al.

McGraw '180 discloses a composition of polyoxyalkylene glycols with hydrofluorocarbon and hydrochlorofluorocarbon refrigerants (col. 1, lines 11-13). McGraw '180 further disclose examples of suitable polyoxyalkylene glycols such as glycerine, pentaerythritol and sorbitol, wherein said polyoxyalkylene glycols have an average molecular weight range from about 400-2000. Moreover, McGraw '180 teach that 1,1,1,2- tetrafluoroethane, 1,1,1, difluoroethane, 1,1,1,

trifluoroethane and pentafluoroethane are suitable refrigerants which may be employed into said working fluid composition. Although McGraw '180 do not exemplify the instantly required composition it would have been obvious to one of ordinary skill in the art to combine the instantly required components in view of the teachings by McGraw '180.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Zehler et al discloses a lubrication for refrigerant heat transfer fluids comprising polyoxyalkylene glycols such as pentaerythritol, dipentaerythritol, and trimethylolpropane.

McGraw et al '169 discloses a refrigeration fluid composition composed of selected hydrochlorofluorocarbons and hydrofluorocarbons with esterified polyether polyols.

Any inquiry concerning this communication should be directed to Nech~~710~~⁹¹⁰s Ogden at telephone number (703) 308-3732.



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ART UNIT 115